FORM MR-AR
(Revised 12/93)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

355 West North Temple
3 Triad center, Suite 350
Salt Lake City, Utah 84180-1203
Telephone: (801) 538-5340
Fax: (801) 359-3940

ANNUAL REPORT OF MINING OPERATIONS

The informational requirements of this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1953, as amended, and the General Rules as promulgated under the Utah Minerals Regulatory Program. An operator conducting mining operations under a Notice of Intention must file an annual operations and progress report (FORM MR-AR) with the Division.

I. General Information

1. Report Time Period: From (mo./yr.) **1/96** To (mo./yr.) **12/96**

2. DOGM File Number (Mine No.): **M/045/004**

3. Mine Name: **Pine Canyon Reclamation Project**

4. Mineral(s) Mined (or permitted to mine): Copper and associated metals.

5. Type of mine: ___ Surface Mine or **X** Underground Mine

6. Legal Description, (Location of Lands Affected):

   Section 17, S1/2, SW1/4;

   Section 20, N1/2 NW1/4, W1/2 NE1/4, SE1/4 NE1/4, E1/2 SE1/4;

   Section 21, SW1/4 SW1/4;

   Section 28, W1/2 NW1/4;

   Section 29, NE1/4 NE1/4;

   Township 3 South, Range 3 West, Salt Lake Baseline and Meridian, Tooele County, Utah.

7. Name of Operator or Company: Kennecott Utah Copper Corporation

8. Permanent Street Address: P. O. Box 6001
   City, State, Zip: 8315 W. 3595 South
   Magna, UT 84044
   Phone: (801) 252-3179

9. Company Representative (or designated operator):
   Name: Elaine J. Dorward-King, Ph.D.
   Title: Director, Environmental Affairs
   Business Address: P. O. Box 6001
   City, State, Zip: Magna, UT 84044
   Phone: (801) 252-3179

X Please check if any of the above information has changed since previous year.

II. Mining and Reclamation

1. Was the mine active during the past year? Yes __ No X

2. If active, how much ore or mineral was mined? The mine was not active in 1996.

3. How much additional acreage was disturbed during the past year? 0 acres

4. Briefly describe any new or additional surface disturbances that occurred during the past year. This description should include the type of work performed, and volume of material moved.

   No new or additional acreage was affected during this reporting period.

5. How much acreage was reclaimed during the past year?

   No reclamation involving recontouring or topsoil emplacement was performed, but approximately 500 acres within and adjacent to the permit boundary were reseeded in 1996.

6. Briefly describe the reclamation work performed during the past year. This description should include methods employed, and an evaluation of the results.

   Aerial seeding was performed on approximately 500 acres on the south wall of Pine Canyon. The seed mix included native grasses, shrubs and trees. The success of the aerial seeding program will be evaluated in 1997.

A thick vegetation cover has been established on the valley floor of Pine Canyon in areas that were reclaimed in previous years.

7. What is the total disturbed acreage at years end?

   The only disturbed acreage left in Pine Canyon are those sites identified in the 1988 reclamation plan that were left for long term use in the canyon. These sites include the Pine Canyon tunnel portal and concrete flume, production shaft headframe, access road, the warehouse/shop, culinary water system, water supply wells, power line to the wells, fresh water tank and the waste rock pile adjacent to the headframe.

8. Briefly summarize any mining and/or reclamation plans for the upcoming year.

   No new reclamation activities are planned for 1996, however, the revegetation will be monitored for success. KUC is currently evaluating potential uses of the Pine Canyon Tunnel portal as part of KUC's overall water management program.

NOTE: Section III., "Additional Information" applies only to **large mining operations.**

III. Additional Information

1. An updated surface facilities map should be attached if there have been significant changes since the previous map was submitted.

   An updated surface facilities map is attached.

2. Any monitoring results or other reports that are required under the terms of the approved notice of intention should also be submitted.

   The following attachments provide the required water monitoring results as described in the approved notice of intent:

   - 1996 Pine Canyon Water Sample Results
   - 1996 Pine Canyon Water Level Information

IV. Signature Requirement

I hereby certify that the foregoing is true and correct.

Name (Typed or Print): Elaine J. Dorward-King, Ph.D.

Title of Operator: Director, Environmental Affairs

Signature of Operator: Elaine J. Dorward-King

Date: January 29, 1997

CARR FORK EXHAUST SHAFT MONTHLY WATER LEVELS FOR 1996

DATE	WATER ELEVATION (FT AMSL)
1/8/96	6192.42
2/1/96	5997.1
3/1/96	6058.16
4/1/96	6091.42
5/1/96	5868.95
6/3/96	5885.7
7/1/96	5706.86
8/1/96	5709.24
9/3/96	5804.42
10/1/96	5882.91
11/4/96	5931.32
12/2/96	5957.41

PINE CANYON WATER QUALITY DATA

	25-Oct-94	02-May-95	05-Jul-95	06-Sep-95	09-Nov-95	05-Jan-96	05-Mar-96
Well Designation	CFSrvc	CFSrvc	CFSrvc	CFSrvc	CFSrvc	CFSrvc	CFSrvc
Sample type	Pumped	Pumped	Pumped	Pumped	Pumped	Pumped	Pumped
pH	7.36	7.14	7.30	7.01	7.25	7.37	7.12
Conductivity	1266	1145	1250	1200	1194	1103	1077
TDS	922	950	930	933	920	1100	790
Chloride	15	17	19	17	17	25	18
Sulfate	390	434	464	437	463	517	369
Bicarbonate	260	251	237	240	239	241	237
Carbonate	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL
Calcium	186	139	190	187	190	192	150
Magnesium	79	67.2	64	73	61	75	60
Sodium	20	15.9	13	15	12	14	12
Potassium	4.2	2.9	3.4	3.6	3.6	3.0	2.7
Copper	0.004	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL
Iron	8.2	6.2	6.3	6	9.8	8.8	1.1
Manganese	0.824	0.82	0.99	0.9	< MDL	0.78	0.97
Zinc	0.034	0.08	0.02	0.03	0.05	0.02	0.02
Aluminum	0.073	NA	NA	NA	< MDL	NA	NA
Nickel	0.014	< MDL	< MDL	< MDL	0.05	0.03	< MDL
Arsenic	0.011	0.007	0.011	0.006	0.012	0.007	< MDL
Lead	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL
Mercury	NA	0.0002	NA	NA	0.0002	NA	NA
Selenium	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL
Molybdenum	0.005	0.006	0.008	< MDL	< MDL	0.008	0.008
Cadmium	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL
Chromium	NA	< MDL	< MDL	< MDL	< MDL	< MDL	< MDL
Ion balance, %	10.44	-6.59	5.33	13.59	4.64	3.90	2.07
% Recovery of TDS	100.53	98.40	107.31	105.08	108.28	97.93	107.27
KEL Sample ID	AC11542	AD03890	AD06987	AD10408	AD13039	AE00129	AE02369

NOTES: Reported analytes are "total metals" in mg/L.
MCLs are EPA regulated limits for public drinking water
WQ log of 9-Jun-94 conducted by COLOG, Inc provided continuous downhole log of conductivity, pH, oxidation/reduction potential, & temperature.
CFFA - Carr Fork Fresh Air shaft
CFEX - Carr Fork EXhaust shaft (BMS1355)
CFSrvc - Carr Fork Service shaft (BMS1356)
D283 - diamond drillhole D283

sde 10-Sep-96

M/045/004

Kennecott Utah Copper Corporation
8315 West 3595 South
P.O. Box 6001
Magna, Utah 84044-6001
(801) 252-3179
(801) 252-3125 (FAX)

Elaine J. Dorward-King, Ph.D.
Director, Environmental Affairs

Kennecott

January 29, 1997

Mr. Wayne Hedberg, Permit Supervisor
Minerals Reclamation Program
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801

Subject: Annual Reports for 1996, Kennecott Utah Copper

Dear Mr. Hedberg:

Enclosed are the completed annual report forms for the following DOGM permits:

- M/035/002 **Bingham Pit and UCD Modernization**
- M/035/011 **4th Line/Copperton Concentrator**
- M/035/015 **North Impoundment**
- M/045/004 **Pine Canyon Reclamation Project**

Also enclosed are one small-scale map covering the entire north Oquirrh Range showing each of the four permit areas and several large-scale maps detailing the surface facilities within the individual permit boundaries.

The permit boundary legal descriptions listed in the annual reports have also been changed from previous years and now are consistent with the original permit descriptions. KUC assumes that for permits covering overlapping areas, the newer permit will take precedence. Any disturbance or reclamation occurring in the overlapping area should be assigned to the newer permit.

KUC intends to inventory the cumulative disturbance and reclamation for each permit to insure they have been accounted for in a manner consistent with the assumption listed in the previous paragraph. Any discrepancies between disturbance or reclamation acreages and the correct permit boundary legal descriptions will be corrected in the 1997 annual report.

For the 1996 report, however, reporting will be done in a manner consistent with previous annual reports. Thus the reclamation performed on the Tailings Impoundment will be accounted for on the 4th line/Copperton Concentrator Annual Report even though it is within the legal boundaries of the Bingham Pit permit.

In addition to the reclamation documented in the attached reports, the following work was conducted on KUC property outside of any DOGM permit boundaries:

- Kessler Canyon - 500 acres aerial seeded with native grasses, shrubs and trees
- Garfield and Surroundings - 38 acres seeded with rye grass, wild flowers and 60 deciduous trees planted
- Town of Copperton - trees and shrubs planted around the outskirts of town, and in the town park and cemetery

If you have any questions about the enclosures or about KUC's interpretation of the individual permit boundaries, please phone me at 252-3179.

Sincerely,

Elaine J. Dorward-King

Elaine J. Dorward-King, Ph.D.
Director, Environmental Affairs

EJDK\RB:bt

Enclosures

File: OPS-RR-BCM-ANNUAL RECLAMATION REPORT